

REMARKS

STATUS OF THE CLAIMS

Applicants have amended Claims 1, 6, and 74. Applicants respectfully request reconsideration of pending Claims 1-8, 17-25, 35-46, 57-75, and 84-99 in light of the following remarks.

SPECIFICATION

The Examiner objected to the disclosure, requiring that the priority data should be updated to reflect the patent numbers. Applicants have amended the priority and respectfully request removal of the objection to the disclosure.

CLAIM REJECTIONS - 35 USC § 102

Independent Claim 1

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by European Patent Application Publication No. 0508580 (EP '580). Claim 1 specifies "a user manipulatable control coupled to the linkage by insertion of the user manipulatable control into the inner panel from the interior side of the inner panel."

EP '580 discloses a latch module for a vehicle door including a door latch mechanism 20, an exterior door handle assembly 10, 11, and a cylinder lock 12 preassembled on a flexible plastic support plate 15. *EP '580*, Abstract, col. 2, lines 14-15. The cylinder lock 12 has a lever 23 connected by a rod 24 to a locking lever 25. *Id.* at col. 2, lines 36-42. An interior door handle (not shown) is connected in a known manner, to the latch mechanism 20 via a push/pull cable 26, so that the interior door handle may actuate a latch release lever 21. *Id.* at col. 2, lines 43-47. EP '580 also discloses that the entire latch module provides a self-contained subassembly which may be assembled and tested prior to fitting to the vehicle. *Id.* at col. 3, lines 19-28. When fitted to the vehicle, the handle assembly 11 and the latch mechanism 20 are secured to the vehicle door in their appropriate locations, and the interior door handle may be secured with respect to

the interior door trim panel prior to it being fitted. *Id.* An external trim bezel will then be fitted around the door handle 10 and secured internally of the door by suitable means. *Id.*

The only “linkage” disclosed in EP ‘580 that can be coupled to an inner panel, as specified by Claim 1, is the push/pull cable 26. If the interior door handle of EP ‘580 is the “user manipulatable control” of Claim 1 and the push/pull cable 26 is the “linkage” of Claim 1, the interior door handle is not coupled to the push/pull cable 26 by insertion of the interior door handle into an inner panel from an interior side of the inner panel. Rather, the interior door handle is connected to the latch mechanism 20 via the push/pull cable 26 before being fitted to the vehicle, so that the entire latch module can be tested before being fitted to the vehicle.

Accordingly, EP ‘580 does not disclose “a user manipulatable control coupled to the linkage by insertion of the user manipulatable control into the inner panel from the interior side of the inner panel,” as specified by Claim 1. Therefore, independent Claim 1 and dependent Claims 2-5 and 8 are allowable.

Dependent Claims 2-5 and 8

Claims 2-5 and 8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by EP ‘580. Claims 2-5 and 8 depend from independent Claim 1, and are therefore allowable for the reasons set forth above with respect to Claim 1. Claims 2-5 and 8 also specify additional patentable subject matter not specifically discussed herein.

Independent Claim 35

Claim 35 stands rejected under 35 U.S.C. § 102(b) as being anticipated by EP ‘580. Independent Claim 35 specifies “a bracket coupled between the latch and the linkage, the bracket being sufficiently resilient to retain the linkage in a position relative to the latch.”

EP ‘580 discloses a latch module for a vehicle door including a door latch mechanism 20, an exterior door handle assembly 10, 11, and a cylinder lock 12 preassembled on a flexible plastic support plate 15. *EP ‘580*, Abstract, col. 2, lines 14-15. The cylinder lock 12 has a lever

23 connected by a rod 24 to a locking lever 25. *Id.* at col. 2, lines 36-42. An interior door handle (not shown) is connected in a known manner, to the latch mechanism 20 via a push/pull cable 26, so that the interior door handle may actuate a latch release lever 21. *Id.* at col. 2, lines 43-47.

If the support plate 15 of EP '580 is the "bracket" of Claim 35, only the latch mechanism 20 is coupled to the support plate 15. None of the linkages disclosed in EP '580 (such as the rod 22, the rod 24, or the push/pull cable 26) is coupled to the support plate 15. Rather, the rods 22 and 24 are coupled to the exterior door handle 10 and the push/pull cable 26 is coupled to the interior door handle. Also, since none of the linkages are coupled to the support plate 15, the support plate 15 cannot retain the linkages in a position relative to the latch mechanism 20, as also specified by Claim 35. Thus, independent Claim 35 is allowable over EP '580.

Claim 35 also stands rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 6,393,767 issued to Fukumoto et al. (Fukumoto). Fukumoto discloses a vehicle door 1 including a door outer panel 2, a door trim 3, and an inner door module 4. *Fukumoto*, col. 3, lines 15-20. The inner door module 4 includes a door inner panel 5. *Id.* at col. 3, lines 27-29. A door lock device 11 is coupled to the door inner panel 5 and a base plate 111. *Id.* at col. 4, lines 22-23 and lines 37-44. As shown in Figure 8, the door lock device 11 includes a latch structure 112, which engages and disengages from a striker secured to the vehicle door. A lever 113 of the door lock device 11 is connected to a door outside handle 16. As shown in Figure 6, a key lever 114 and a rod 14 are connected to a door key cylinder 20, which is attached to the door outer panel 2 through another connecting rod 18. The connecting rod 18 extending from the key cylinder 20 is disposed on the inside of the door inner panel 5 and is rotatably connected to a key rotary rod 20d by a pin 18a at one end in the inner side of the door inner panel 5. The other end of the connecting rod 18 is secured to the key lever 114.

The key cylinder 20 of Fukumoto is not a "latch" as specified by Claim 1, because the key cylinder 20 does not engage and disengage from a striker secured to the vehicle door. As shown in Figure 8 of Fukumoto, the latch structure 112 is not coupled to the door outer panel 2. Thus, neither the key cylinder 20 nor the latch structure 112 of Fukumoto is "a latch securable to the door, located on the interior side of the outer panel," as specified by Claim 35. However,

assuming that the latch structure 112 of Fukumoto is the “latch” of Claim 35, the lever 113 of Fukumoto is the “linkage” of Claim 35, and the base plate 111 of Fukumoto is the “bracket” of Claim 35, the base plate 111 is not coupled between the latch structure 112 and the lever 113. Rather, as shown in the side view of Figure 6 and the top view of Figure 8, only the latch structure 112 is coupled to the base plate 111. The lever 113 is positioned through an elongated hole 111d in a flange wall 111c of the base plate 111. *Id.* at col. 5, lines 46-50. The elongated hole 111d of the base plate 111 is slightly larger than the operational range of the door-opening lever 113. *Id.* at col. 5, lines 62-65. The lever 113 is then coupled to the opposite side of the latch structure 112 as the base plate 111. In addition, since the lever 113 is not coupled to the base plate 111, the base plate 111 cannot be sufficiently resilient to retain the lever 113 in a position relative to the latch structure 112. Rather, the lever 113 can move relatively freely within the elongated hole 111d of the base plate 111. Thus, independent Claim 35 is allowable over Fukumoto.

Neither EP ‘580 nor Fukumoto discloses “a bracket coupled between the latch and the linkage, the bracket being sufficiently resilient to retain the linkage in a position relative to the latch,” as specified by Claim 35. Thus, independent Claim 35 and dependent Claims 36-46 are allowable.

Dependent Claims 36-42 and 44-46

Claims 44-46 stand rejected under 35 U.S.C. § 102(b) as being anticipated by EP ‘580. Claims 36-42, 45, and 46 also stand rejected under 35 U.S.C. § 102(b) as being anticipated by Fukumoto. Claims 36-42 and 44-46 depend from independent Claim 35, and are therefore allowable for the reasons set forth above with respect to Claim 35. Claims 36-42 and 44-46 specify additional patentable subject matter not specifically discussed herein.

Independent Claim 57

Claim 57 stands rejected under 35 U.S.C. § 102(b) as being anticipated by EP '580. Independent Claim 57 specifies "a shield at least partially covering the linkage along a length of the linkage between the user manipulatable control and the latch to at least partially restrict access to the linkage."

EP '580 discloses a latch mechanism 20 coupled to a push/pull cable 26 that is coupled to an interior door handle (not shown). EP '580 also discloses that the latch mechanism 20 is coupled to rods 22, 24 that are coupled to an exterior door handle 10. EP '580 further discloses a support plate 15 positioned below the exterior door handle 10. However, the support plate 15 does not even partially cover the push/pull cable 26 or the rods 22, 24. Also, the support plate 15 is not positioned between the interior door handle and the latch mechanism 20 to restrict access to the push/pull cable 26. In addition, the support plate 15 is not positioned between the exterior door handle 10 and the latch mechanism 20 to restrict access to the rods 22, 24. Thus, Claim 57 is allowable over EP '580.

Claim 57 also stands rejected under 35 U.S.C. § 102(b) as being anticipated by Fukumoto. Fukumoto discloses a vehicle door 1 including a door outer panel 2, a door trim 3, and an inner door module 4. *Fukumoto*, col. 3, lines 15-20. The inner door module 4 includes a door inner panel 5. *Id.* at col. 3, lines 27-29. A door lock device 11 is coupled to the door inner panel 5 and a base plate 111. *Id.* at col. 4, lines 22-23 and lines 37-44. As shown in Figure 8, the door lock device 11 includes a latch structure 112, which engages and disengages from a striker secured to the vehicle door. A lever 113 of the door lock device 11 is connected to a door outside handle 16. As shown in Figure 6, a key lever 114 and a rod 14 are connected to a door key cylinder 20, which is attached to the door outer panel 2 through another connecting rod 18. The connecting rod 18 extending from the key cylinder 20 is disposed on the inside of the door inner panel 5 and is rotatably connected to a key rotary rod 20d by a pin 18a at one end in the inner side of the door inner panel 5. The other end of the connecting rod 18 is secured to the key lever 114.

The key cylinder 20 of Fukumoto is not a “latch” as specified by Claim 57, because the key cylinder 20 does not engage and disengage from a striker secured to the vehicle door. Even if the key cylinder 20 were a “latch,” the supporting clip 20b (as identified by the Examiner and as shown in Figure 6) cannot serve as the “shield” of Claim 57 because it is not positioned between the outside door handle 16 and the key cylinder 20. Rather, the supporting clip 20b is positioned between the key cylinder 20 and the base plate 111. As shown in Figure 8 of Fukumoto, the latch structure 112 is not coupled to the door outer panel 2. Thus, neither the key cylinder 20 nor the latch structure 112 of Fukumoto is “a latch securable to the door and located on the interior side of the outer panel,” as specified by Claim 57.

However, assuming that the latch structure 112 of Fukumoto is the “latch” of Claim 57, the outside door handle 16 of Fukumoto is the “user manipulatable control” of Claim 57, and the connecting rod 14 and the lever 113 of Fukumoto are the “linkage” of Claim 57, Fukumoto does not disclose any structure that could serve as a shield between the outside door handle 16 and the latch structure 112. As shown in Figure 8 of Fukumoto, the base plate 111 is positioned perpendicular to the door outer panel 2, and thus, cannot serve as shield in that direction. As shown in Figure 6 of Fukumoto, right edge of the base plate 111 ends without contacting the door outer panel 2, and thus, cannot serve as a shield in that direction. Therefore, Claim 57 is allowable over Fukumoto.

Neither EP ‘580 nor Fukumoto discloses “a shield at least partially covering the linkage along a length of the linkage between the user manipulatable control and the latch to at least partially restrict access to the linkage,” as specified by Claim 57. Thus, independent Claim 57 and dependent Claims 58-67 are allowable.

Dependent Claims 58-62 and 63-67

Claims 58-60 and 63-67 stand rejected under 35 U.S.C. § 102(b) as being anticipated by EP ‘580. Claims 58-62 and 65-67 also stand rejected under 35 U.S.C. § 102(b) as being anticipated by Fukumoto. Claims 58-62 and 63-67 depend from independent Claim 57, and are consequently allowable for the same reasons set forth above with respect to Claim 57. Claims

58-62 and 63-67 recite additional limitations not taught or suggested in the prior art and are patentable for that reason as well.

Independent Claim 68

Claim 68 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Fukumoto. Independent Claim 68 specifies “the outside door lock being freely removable from the housing in the first state and the outside door lock being resistant to removal from the housing in the second state, a portion of the door surrounding the aperture being coupled between the flange and the housing when the outside door lock is in the second state.”

Fukumoto discloses a key cylinder 20 that is inserted into a through-hole 2c provided on a door outer panel 2. The key cylinder 20 is also inserted through a through-hole 5a of a door inner panel 5 after traversing a door outer space A. As shown in Figure 6 of Fukumoto, the key cylinder 20 is supported on a cylinder case 20c by a supporting clip 20b secured to the door outer panel 2. The key cylinder 20 is thus supported at respective ends by the door outer panel 2 and the door inner panel 5 to assure the stability of the attachment of the key cylinder 20 to the vehicle door assembly. *Fukumoto*, col. 6, lines 46-54.

If the cylinder case 20c of Fukumoto is the “housing” of Claim 68, the key cylinder 20 of Fukumoto is the “outside door lock” of Claim 68, the through-hole 2c of Fukumoto is the “aperture” of Claim 68, and the supporting clip 20b of Fukumoto is the “flange” of Claim 68, a portion of the door surrounding the through-hole 2c is not coupled between the supporting clip 20b and the cylinder case 20c when the key cylinder 20 is in a second state. Rather, a portion of the door is coupled between the supporting clip 20b and the key cylinder 20 itself, assuming that the assembled configuration shown in Figure 6 of Fukumoto is a “second state” in which the key cylinder 20 is resistant to removal from the cylinder case 20c. Even assuming that a portion of the key cylinder 20 is the “flange” of Claim 68, Fukumoto does not disclose any structure that would allow the key cylinder 20 to be freely removable from the cylinder case 20c in a first state, but resistant to removal from the cylinder case 20c in a second state.

Thus, Fukumoto does not disclose “the outside door lock being freely removable from the housing in the first state and the outside door lock being resistant to removal from the housing in the second state, a portion of the door surrounding the aperture being coupled between the flange and the housing when the outside door lock is in the second state,” as specified by Claim 68. Thus, independent Claim 68 and dependent Claims 69-73 are allowable.

Dependent Claims 69-73

Claims 69-73 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Fukumoto. Claims 69-73 depend from independent Claim 68, and are therefore allowable for the reasons set forth above with respect to Claim 68. Claims 69-73 specify additional patentable subject matter not specifically discussed herein.

Independent Claim 84

Claim 84 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Fukumoto. Claim 84 specifies “a slot along which the latch is movable with respect to the door, the slot dimensioned to slidably receive the at least one projection, the latch movable between a first state where the at least one projection is located at a first location along the slot, and a second state where the at least one projection is located in a second location spaced apart from the first location along the slot, the latch being securable to the door in the second state.”

Fukumoto discloses that a pair of flange walls 111b, 111c of the base plate are secured to walls 521, 524 of a lock side panel 52 from the inside of the compartment by respective fastening bolts 115, 116 and nuts 117, 118 to attach the door lock device 11 on the inner surface of the door inner panel. *Fukumoto*, col. 4, lines 62-67. First, the fastening bolts 115, 116 are not projections of the door lock device 11. Second, the holes through which the fastening bolts 115, 116 are positioned are not slots along which the door lock device 11 is movable. Third, the door lock device 11 is not movable between a first state where the fastening bolt 115 or 116 is at a first location along the hole and a second state where the fastening bolt 115 or 116 is at a second location spaced apart from the first location along the hole, primarily because the holes that receive the fastening bolts 115 or 116 do not allow for two positions. Fourth, the door lock

device 11 is not secured to the door when the fastening bolt 115 or 116 is located in a second position. Even if the holes through which fastening bolts 115 and 116 extend allow some slop or play of the door lock device 11 before tightening the fastening bolts 115 and 116, the slop or play does not provide a second location spaced apart from a first location.

Thus, Fukumoto does not disclose “a slot along which the latch is movable with respect to the door, the slot dimensioned to slidably receive the at least one projection, the latch movable between a first state where the at least one projection is located at a first location along the slot, and a second state where the at least one projection is located in a second location spaced apart from the first location along the slot, the latch being securable to the door in the second state,” as specified by Claim 84. Therefore, independent Claim 84 and dependent Claims 85-99 are allowable.

Dependent Claims 85-99

Claims 85-99 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Fukumoto. Claims 85-99 depend from independent Claim 84, and are therefore allowable for the reasons set forth above with respect to Claim 84. Claims 85-99 also specify additional patentable subject matter not specifically discussed herein.

CLAIM REJECTIONS - 35 USC § 103

Dependent Claims 43-44 and 63-64

Claims 43-44 and 63-64 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukumoto. Claims 43-44 depend from Claim 35 and Claims 63-64 depend from Claim 57, and are consequently allowable for the reasons set forth above with respect to Claims 35 and 57. Claims 44 and 63-64 specify additional patentable subject matter not specifically discussed herein.

In addition, Claim 43 specifies that the bracket is flexible. Fukumoto teaches that a lock reinforcement 22 can be water-proof, light-weight, and plate-like. *Fukumoto*, col. 5, lines 20-25.

However, Applicants respectfully submit that Fukumoto does not teach or suggest that the lock reinforcement 22 is flexible. For example, many types of metals could be water-proof, light-weight, and plate-like, but not necessarily flexible. EP '580 does not cure the deficiencies of Fukumoto. None of the linkages of EP '580 are coupled to the support plate 15, and thus, the support plate 15 (whether flexible or not) cannot retain the linkages in a position relative to the latch mechanism 20, as specified by Claim 35. Accordingly, neither EP '580 nor Fukumoto discloses "a flexible bracket coupled between the latch and the linkage, the bracket being sufficiently resilient to retain the linkage in a position relative to the latch," as specified by Claims 35 and 43.

Independent Claim 17

Claim 17 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,902,004 issued to Waltz et al. (Waltz) in view of U.S. Patent No. 5,706,554 issued to Ruckert et al. (Ruckert). Claim 17 specifies "a self-docking inside door handle assembly at least partially insertable within the aperture from the interior side to couple to the frame through the aperture without the use of fasteners and to operably couple to the latch, the inside door handle assembly being operable to selectively actuate the latch between the open and closed states."

Waltz teaches an outside door panel 1, a mounting plate 3, a latch 4, an inner door handle 6, and a door lining 7 having an aperture 70. As shown in Figure 1 of Waltz, the inner door handle 6 appears to be inserted from an exterior side of the door lining 7 into the aperture 70. Thus, Waltz does not teach or suggest "a self-docking inside door handle assembly at least partially insertable within the aperture from the interior side," as specified by Claim 17. Also, Waltz does not teach or suggest that the inner door handle 6 can be inserted through the aperture 70 in order to be operably coupled to the latch 4. In addition, as stated by the Examiner on page 4 of the Office action, Waltz fails to teach mounting the inner door handle 6 without the use of fasteners.

Ruckert fails to cure the deficiencies of Waltz. First, Ruckert teaches that a handle fitting 1 is intended to be mounted to the exterior of a door, rather than the interior of a door. For

example, Ruckert teaches a holding member 15 including an upper end 17 and a slide 16 that engages a door 2 and that “the removal of the handle fitting can be effected only from the inner side of the door.” *Ruckert*, col. 5, lines 54-67 and col. 6, lines 1-26. Thus, Ruckert does not teach or suggest “a self-docking inside door handle assembly at least partially insertable within the aperture from the interior side,” as specified by Claim 17. Also, Ruckert does not teach or suggest that the handle fitting 1 can be inserted through the opening 3 in order to be operably coupled to a latch. Presumably, another assembly step is required to couple the handle fitting 1 of Ruckert to a latch that secures the door to the vehicle.

Neither Waltz nor Ruckert, either alone or in combination, teaches or suggests “a self-docking inside door handle assembly at least partially insertable within the aperture from the interior side to couple to the frame through the aperture without the use of fasteners and to operably couple to the latch, the inside door handle assembly being operable to selectively actuate the latch between the open and closed states,” as specified by Claim 17. Thus, independent Claim 17 and dependent Claims 18-25 are allowable.

Dependent Claims 18-25

Claims 18-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Waltz in view of Ruckert. Claims 18-25 depend from independent Claim 17, and are therefore allowable for the reasons set forth above with respect to Claim 17. Claims 18-25 also specify additional patentable subject matter not specifically discussed herein.

DOUBLE PATENTING REJECTION

Claims 68-75 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 35-44 of Applicants’ prior U.S. Patent No. 6,530,251 (the ‘251 Patent).

In order to further prosecution of the present application, without admitting that the ‘251 Patent encompasses the same subject matter as the present application and without admitting that the subject matter of the provisionally-rejected claims is obvious over the ‘251 Patent, a terminal

disclaimer in accordance with 37 C.F.R. § 1.321(a) will be filed to overcome these rejections upon Claims 68-75 being deemed to include patentable subject matter.

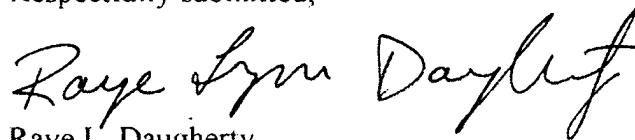
ALLOWABLE SUBJECT MATTER

Applicants appreciate the indication that Claims 6-7 and 74-75 include patentable subject matter. Applicants have amended Claims 6 and 74 into independent form by incorporating all of the limitations of the base claim and any intervening claims. Applicants respectfully request allowance of Claims 6-7 and 74-75.

CONCLUSION

In light of the above, Applicants respectfully request reconsideration and allowance of Claims 1-8, 17-25, 35-46, 57-75, and 84-99.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Raye Lynn Daugherty". The signature is fluid and cursive, with the first and last names being more prominent.

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